

Meeting Notes  
**NORTH DELTA IMPROVEMENTS GROUP MEETING**  
Wednesday, February 16, 2005  
9:30-11:30 at Jones & Stokes (2600 V Street)

**ATTENDANCE LIST:**

Burkholder, Brad	California Department of Fish and Game
Clark, Robert	California Central Valley Flood Control Association
Crouch, Craig	Sacramento County Water Agency
Dutton, Bill	US Bureau of Reclamation
Elliott, Chirs	Jones & Stokes
Fleenor, Bill	UC Davis
Hadl, Stefan	KCRA-TV
Harvey, Tom	US Fish and Wildlife service
Hoppe, Walt	Point Pleasant
Kirkham, Bill	Franklin Pond
Knittweis, Gwen	California Department of Water Resources
Labrie, Gil	DCC Engineering
Lucchesi, Ed	San Joaquin County Mosquito and Vector Control District
Martin, Monica	California Department of Water Resources
Martin, Sara	Jones & Stokes
Mello, Steve	Reclamation District 563
Moughamian, Raffi	UC Davis
Orcutt, Bob	California Department of Fish and Game
Schmutte, Curt	California Department of Water Resources
Simons, Rachel	East Bay Municipal Utility District
Stuart, Jeff	NOAA Fisheries
Trieu, Don	MBK Engineers
Whitener, Keith	The Nature Conservancy
Wilson, Daniel	Delta Protection Commission
Zemitis, Collette	California Department of Water Resources

**HANDOUTS**

- Meeting Agenda
- Revised Meeting Notes from January 12, 2005 meeting
- North Delta Mike 11 modeling results handout packet

**1. INTRODUCTIONS – Gwen Knittweis, DWR**

Gwen Knittweis welcomed everyone to the meeting and facilitated a round of introductions. Ms. Knittweis then called attention to the revised notes from the January 12, 2005 North Delta Improvements Group (NDIG) meeting and said that comments could be sent to the North Delta reflector e-mail address, which is [ndelta@calwater.ca.gov](mailto:ndelta@calwater.ca.gov).

**2. HYDRAULIC MODELING RESULTS PRESENTATION—'86 HYDROLOGY – Bill Fleenor, UC Davis**

Ms. Knittweis turned the meeting over to Bill Fleenor of UC Davis (UCD) for presentation of the latest batch of Mike 11 modeling results. Dr. Fleenor noted that it had been discovered that previous model runs had been performed with a datum value for McConnell that was too high. He assured the group that the elevated stages at McConnell had caused minor differences in stage at New Hope for those runs, and that the issue has been corrected.

Dr. Fleenor then began his presentation of the 1986 hydrology modeling results. At the request of the NDIG, Dr. Fleenor has addressed several additional points for this model run and any subsequent model runs, including McConnell, Point Pleasant, Lambert Road, and some points further south. The results are as follows:

Index Point	Location	Peak Stage (ft NGVD 29)						
		1986 Flood	1986 No Failures	Eco Opt #2 Base Case	Eco Opt #2 with Flood Option			
					Option #1	Option #2	Option #3	Option #4
BF-1	Benson's Ferry	17.9	18.8	16.5	15.9	16.2	16.3	16.0
MR-2	Mokelumne Riv.	14.1	15.5	13.7	12.1	12.9	13.1	12.0
SG-3	Snodgrass Sl.	12.7	14.9	14.2	13.1	13.7	13.9	12.8
NH-4	New Hope	12.0	13.2	13.3	11.7	12.6	12.8	11.9
SF-5	SF Mokelumne	8.5	9.3	9.3	8.5	9.0	8.8	9.1
SF-6	SF Mokelumne	7.1	7.5	7.6	7.3	7.4	7.4	7.9
SF-7	SF Mokelumne	6.9	7.3	7.3	7.1	7.2	7.2	7.4
NF-8	NF Mokelumne	11.0	12.4	12.6	11.4	11.4	11.4	12.2
NF-9	NF Mokelumne	8.2	9.5	9.6	8.9	9.2	9.4	9.0
NF-10	NF Mokelumne	6.9	7.8	7.9	7.4	7.7	7.8	7.7
MC-11	McConnell	46.3	46.34	46.3	46.3	46.3	46.3	46.3
TC-12	Twin Cities Rd.	24.9	24.9	24.6	24.6	24.6	24.6	24.6
LR-13	Lambert Rd.	12.8	14.9	14.2	13.1	13.7	13.7	12.8
PP-14	Point Pleasant	12.1	12.3	12.1	12.1	12.1	12.1	12.0
TT-15	Terminus Tract	6.8	7.1	7.2	7.0	7.1	7.1	7.2
NS-16	Conf of NF & SF	6.8	7.2	7.2	7.1	7.1	7.2	7.2
Detention basin volume with 10-ft. weir (ac-ft):					35,800	14,400	13,800	N/A

Dr. Fleenor pointed out that all three detention basin options on Staten Island were modeled with a 10-foot weir but will also be modeled with weirs at 9 feet for flood control options #2 and #3. He will e-mail out the results to DWR to be sent out to the North Delta reflector when they are available.

Steve Mello remarked that the downstream effects of the dredging and levee-raising option (option #4) appear almost negligible, and don't seem unmitigable, as there isn't much of a difference between the effects of option #1 and option #4. Dr. Fleenor pointed out that the conveyance benefits of dredging are fleeting, as the sediment begins to accumulate again almost immediately.

Dr. Fleenor observed that in looking at the additional points further north, it became clear that stages at New Hope are very sensitive to the levee failure on Glanville Tract. Daniel Wilson noted that he would be interested in seeing the results of a model run focused specifically on floodplain loss north of Franklin Pond, as North Delta residents have argued for years that development (and subsequent loss of floodplain) in that area would be destructive for the North Delta. Craig Crouch observed that the "base case" scenario, with no failures, shows a stage of 14.2 at Lambert Road, which means that the levee would probably be overtopping anyway. Walt Hoppe pointed out that the stage shown for Point Pleasant in the "1986 flood" numbers are two feet lower than the actual stage—it is showing 12.1 feet, but surveyed data measured at 14.1 feet, even with the levee failures.

Dr. Fleenor encouraged everyone to remember that this model is using the 1986 hydrology, but the channel geometry is the most accurate known today, so differences between historical and modeled stages are to be expected. He admitted, however, that it is tough to model local effects in the Point Pleasant area in 1986, because the only available data for Morrison Creek flow were the daily average values. Mr. Crouch felt that the model should assume overtopping of Lambert Road.

Mr. Wilson pointed out that the New Hope gage is located downstream of the bridge, and asked if the NH-4 data point (New Hope) is located upstream or downstream of the bridge. Dr. Fleenor answered that the point is at the bridge, but that it makes almost no difference to a one-dimensional model whether it is upstream or downstream of the bridge. Mr. Wilson indicated that it should make quite a difference—in 1997, there was a foot of difference in stage upstream and downstream of the bridge. It is historically the prime bottleneck in the north delta area as the marina breaking loose causes debris to pile up there very quickly. He does not feel that a rational engineering discussion can be had without taking into account debris piling up at the New Hope bridge and the large cement block that holds up Miller's Ferry bridge.

Dr. Fleenor indicated that while running the 1997 hydrology, they did an exercise to see what the result would be with a constriction at New Hope—they reduced the volume of the channel at the bridge by 10 percent and 20 percent. With a 20 percent reduction in volume at the bridge, it caused a 1.5-foot stage increase at the eastern tip of Dead Horse Island. He offered to provide those results to Mr. Wilson if he was interested. Dr. Fleenor speculated that there are ways to model with most models to simulate blockage at a bridge. He suggested one could simulate the marina breaking loose by programming in a radial gate at the bridge and closing it partway through the flood simulation.

Ms. Knittweis felt that it may not be necessary to simulate the marina breaking loose, as all of these alternatives include degrading the levees on McCormack-Williamson, which would eliminate the surge effect that usually causes this to occur. Mr. Wilson felt that elimination of the surge effect is not enough of an insurance policy to confidently assume nothing will break loose from the marina, since there's no way to ensure people aren't tying off to tree branches or otherwise insecurely mooring their boats, and as long as big floating objects remain located upstream of the bridge, they will break loose during high flow events and clog at the bridge. He continued that it would be silly to spend \$200 million on a flood control project when a marina worth \$500,000 could ruin project benefits. Mr. Wilson suggested either modeling breakaway boats, or including buyout of the marina as a part of the project. With buyout, the marina could be removed or relocated to a better area, like the interior of McCormack-Williamson Tract or a location downstream of the New Hope Bridge.

Mr. Crouch suggested DWR prepare a staff paper analyzing the feasibility of a marina buyout option for the project. Ms. Knittweis agreed that a staff paper on the "marina issue" would be a good idea. She mentioned that DWR had previously looked at the possibility of funding upgrades to better moorings at the marina. They ultimately determined, however, that it would be too difficult to police the marina to ensure that the moorings were being used properly. Tom Harvey suggested contacting the Coast Guard for assistance on the marina issue, as it might be considered a hazard to navigation.

Mr. Hoppe inquired as to why no one was discussing the significance of the 2.1-foot increase in stage at Lambert Road in the "1986 No Failures" case and the 1.4-foot increase in the "Base Case" (McCormack-Williamson only) scenario. Mr. Crouch asked North Delta staff not to discount the Lambert Road stage increases in the base case scenario as "no problem". Mr. Hoppe indicated that he thinks the project should remain true to its initial goal of flood benefits for the entire north delta area. It appears to him that the project seems to be moving away from that ideal, a move that seems to be proven by the fact that DWR is not modeling the 11f alternative.

Monica Martin responded that DWR has modeled the 11f alternative, however they haven't shared the results with the public as they need to discuss them with Sacramento County and SAFCA first.

Ms. Knittweis assured the group that DWR's goal is still to design a project that benefits the entire North Delta area.

Robert Clark asked if any of the flood control options had been modeled in combination with each other—for example, detention on north Staten Island combined with dredging and levee raising. Ms. Knittweis answered that it had been previously determined that each of the downstream flood control options (detention basins and dredging) should be separate, as staff is currently unsure of the feasibility of ensuring dredging in perpetuity.

Mr. Mello then reported back to the group with the results of the channel depth study performed recently by Reclamation District 563 in the North Fork Mokelumne River west of Staten Island. As he suspected, a 1,400-foot stretch of the river is significantly shallower than the channel upstream and downstream. Upstream and downstream portions of the channel average 22 to 28 feet in depth, whereas the shallow portion averages only 10 to 12 feet in depth. Additionally, at the confluence of the north and south forks of the Mokelumne River, channel depth averages only 8 to 9 feet. He felt this information was important to share with North Delta staff, as it might be helpful in designing a more strategic dredging plan, focusing only on those areas that are shallowest.

Ms. Knittweis responded that the DWR sedimentation folks would say that pockets of sedimentation change over time. Mr. Mello agreed that sedimentation deposits do change over time, but that from anecdotal evidence, such as reports from fishermen, the area in question on the North Fork Mokelumne has been very shallow for years.

Curt Schmutte asked if the sediment in that area was soft. Mr. Mello answered that the sediment is generally soft, but pointed out that the river grade flattens out and the channel widens at that point, so sediments naturally drop out there. Mr. Schmutte indicated that the shallow sections of channel shouldn't be much of an issue during large storm events, as those soft sediments tend to mobilize during high flows. Mr. Mello agreed in theory, but pointed out that actual historical data in this particular location is lacking. Monica Martin said that DWR has been working with KSN Engineers to get their bathymetry, which covers the channels from bank to bank and should give DWR a better idea of what the channel profiles really look like in the project area.

Keith Whitener mentioned that he and Margit Aramburu, of the Delta Protection Commission, have been looking into a programmatic delta-wide dredging permit. As a part of that effort, Margit has compiled data on dredging that might be helpful to North Delta staff.

### **3. MISCELLANEOUS UPDATES – Gwen Knittweis, DWR**

#### **North Delta Agency Team**

Ms. Knittweis announced that the next North Delta Agency Team meeting is scheduled for Tuesday, March 1, at Jones & Stokes from 9:30 a.m. to 11:30 p.m. Discussion topics will include best management practices to reduce mosquito risk, dredging permit requirements, and DWR Division of Safety of Dams requirements for a Staten Island internal levee.

#### **CALFED Science Board Presentation**

She also informed the group that North Delta staff will present to the CALFED Science Board in early March as part of a strategy to ensure Ecosystem Restoration Program funding for the restoration portions of the project. Ms. Knittweis will report how that presentation went at the next NDIG meeting.

### **DWR Upper Management**

Mr. Schmutte informed the group that North Delta staff and Les Harder, DWR Chief of Flood Management, had met with Sacramento County regarding the project, and DWR upper management has subsequently decided that it is time to reassess the project, its costs, funding options, and phasing options. Mr. Mello expressed his concern that this may lead to the agencies putting ecosystem restoration first, with the flood control components as a secondary priority, with no follow-through on the flood control components. Mr. Schmutte assured Mr. Mello that DWR wants to implement the flood control components as much as anyone else.

Mr. Wilson asked if staff had recently developed any cost estimates. Ms. Knittweis responded that staff are currently revising the cost estimates, but that she could safely say the project will cost over \$100 million. Mr. Wilson said he would be interested to see the cost differences between the project components.

### **Staff Departure**

Ms. Knittweis announced that Collette Zemitis, North Delta Staff Environmental Scientist, has accepted an offer to work for Caltrans out of Bishop, California. Mr. Schmutte called attention to all of Ms. Zemitis' great work in water quality, biological issues, and mosquito issues while she was on staff. He referred to her as a catalyst in pulling the project together, and wished her well in her new endeavor.

## **6. NEXT MEETING**

Ms Knittweis indicated that agenda topics for the next NDIG meeting would include additional modeling results, outcomes of the CALFED Science Panel presentation, an update on feedback on the project from DWR upper management, and an EIR progress update. The next meeting was scheduled for Wednesday, March 16, from 9:30 a.m. to 11:30 a.m. at Jones & Stokes. Ms. Zemitis pointed out that the next Mokelumne-Cosumnes Watershed Alliance meeting would be held on the same day, from 1 p.m. to 3 p.m. at the Cosumnes River Preserve.

## **7. ACTION ITEMS**

	<u><b>Action Item</b></u>	<u><b>Responsibility</b></u>
1	Prepare staff paper on New Hope Marina issue	DWR
2	Consider "base case" stage increase in the Point Pleasant area as a significant change	DWR
3	Look into strategic dredging locations (i.e. shallow areas)	DWR
4	Contact Margit Aramburu for dredging information	DWR
5	Prepare meeting notes	J&S